

**BRF2N60**  
Rev.E Dec.-2015

TO-220F      N      MOS      N-CHANNEL MOSFET in a TO-220F Plastic Package.

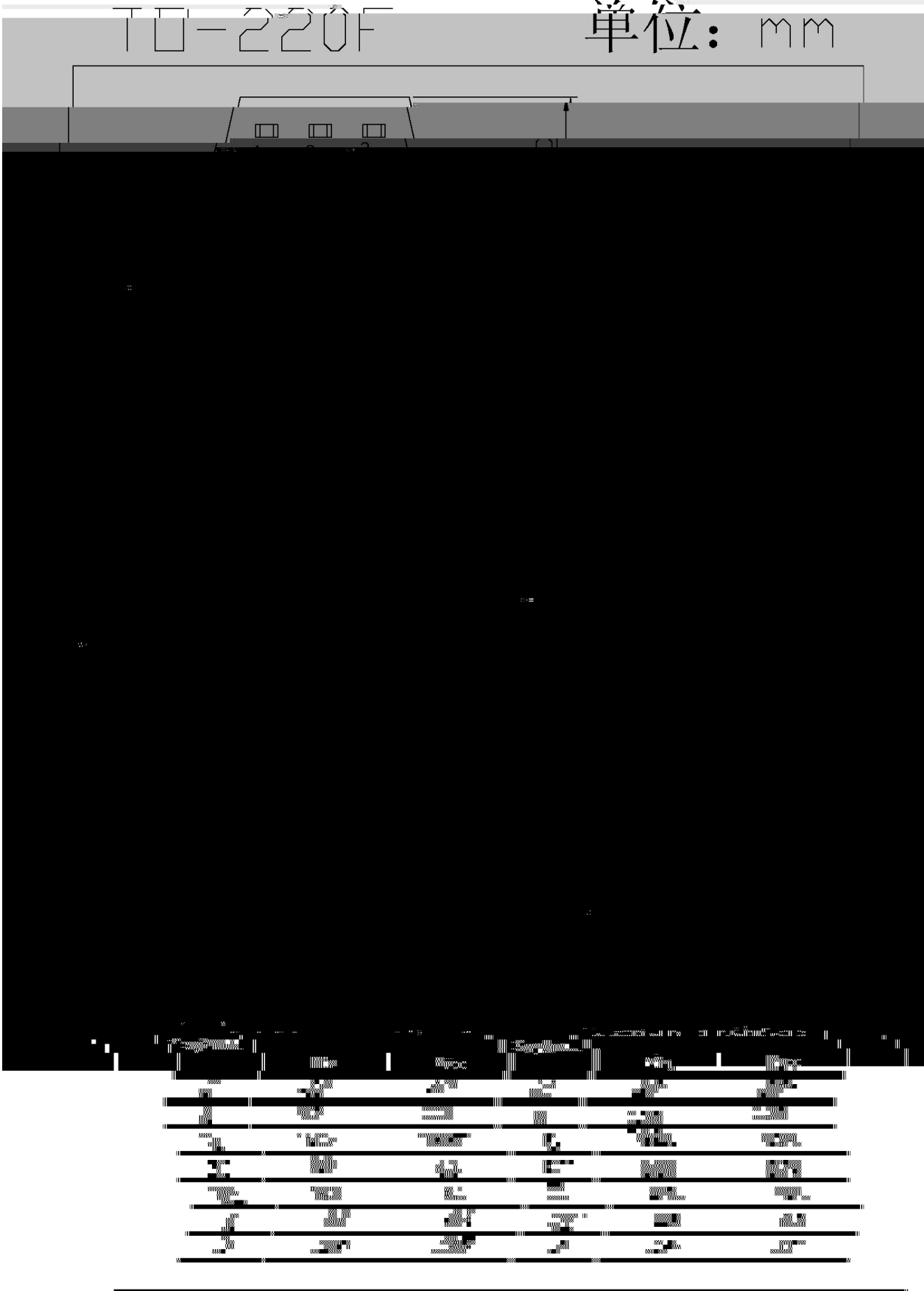
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Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	600	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	2.0	A
Drain Current	$I_D(T_C=100^\circ\text{C})$	1.3	A
Drain Current - Pulsed	$I_{DM}$	6.0	A
Gate-Source Voltage	$V_{GSS}$	$\pm 30$	V
Single Pulsed Avalanche Energy	$E_{AS}$	120	mJ
Repetitive Avalanche Energy	$E_{AR}$	5.4	mJ
Avalanche Current	$I_{AR}$	2.0	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	23	W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V$ $I_D=250\text{ A}$	600			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=600V$ $V_{GS}=0V$			1.0	A
		$V_{DS}=480V$ $T_C=125^\circ\text{C}$			100	A
Gate-Body Leakage Current, Forward	$I_{GSS}$	$V_{GS}=\pm 30V$ $V_{DS}=0V$			$\pm 0.1$	A
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\text{ A}$	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=1.0A$		4.0	5.0	
Forward Transconductance	$g_{FS}$	$V_{DS}=40V$ $I_D=1.0A$		2.05		S
Drain-Source Diode Forward Voltage	$V_{SD}$	$V_{GS}=0V$ $I_S=2.0A$			1.4	V
Input Capacitance	$C_{iss}$	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0\text{MHz}$		320	420	pF
Output Capacitance	$C_{oss}$			35	46	pF
Reverse Transfer Capacitance	$C_{rss}$			4.5	6.0	pF
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=300V$ $I_D=2.0A$ $R_G=25$		8.0	30	ns
Turn-On Rise Time	$t_r$			23	60	ns
Turn-Off Delay Time	$t_{d(off)}$					

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/ Package Dimensions





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